



# UNITED STATES PATENT AND TRADEMARK OFFICE

*Notes*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,812	11/24/2003	Boris Ginzburg	P-6221-US	3101
49444	7590	01/09/2008	EXAMINER	
PEARL COHEN ZEDEK LATZER, LLP			CHO, UN C	
1500 BROADWAY, 12TH FLOOR			ART UNIT	PAPER NUMBER
NEW YORK, NY 10036			2617	
MAIL DATE		DELIVERY MODE		
01/09/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/718,812	GINZBURG, BORIS
	Examiner Un C. Cho	Art Unit 2617

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 24 November 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-28 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-28 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 24 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>11/24/2003 &amp; 6/27/2005</u>	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 11/24/2003 and 6/27/2005 have been recorded in file and considered by the examiner.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17 – 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 17 lacks the proper preamble necessary for a statutory computer program product claim because the preamble is directed to “a storage medium” which can be interpreted as a program. See MPEP 2100 for guidance on computer related inventions.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 9, 10, 16, 17, 20 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Bodenmann et al. (US 7,015,833 B1).

Regarding claim 1, Bodenmann discloses a method comprising indicating in a data fragment that said fragment is a last fragment of a group (Fig. 6, element 605; Bodenmann: Col. 17, line 39 through Col. 18, line 13).

Regarding claim 9, Bodenmann discloses transmitting a group of fragments from a first station to a second station without said first station transmitting an acknowledgement request at the end of said group (Bodenmann: Col. 17, line 39 through Col. 18, line 13 wherein the cordless device communicates via a wireless link with a receiver and the packet sent from the cordless device does not request an acknowledgment).

Regarding claim 10, Bodenmann discloses transmitting a last fragment of said group with an indication of no more fragments in said group (Bodenmann: Col. 17, line 39 through Col. 18, line 13).

Regarding claim 16, Bodenmann discloses transmitting a group of fragments without receiving a start block acknowledgement response (data packets are transmitted regardless of receiving a start block acknowledgement response; Bodenmann: Col. 17, line 39 through Col. 18, line 13).

Regarding claim 17, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 20, Bodenmann discloses a communication device (Fig. 1, elements 103a – 103d) comprising a dipole antenna (cordless device

communicates with the receiver via a wireless communication link, inherently using an antenna); a processor (each cordless device inherently having a processor for generating and transmitting information via a wireless communication link (Fig. 1, element 105)) to indicate in a data fragment that said fragment is a last fragment in a group (Bodenmann: Col. 3, line 46 through Col. 4, line 36 and Col. 17, line 39 through Col. 18, line 13).

Regarding claim 23, the claim is interpreted and rejected for the same reason as set forth in claim 1.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 – 6, 8, 11 – 15, 18, 19, 21, 22 and 24 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodenmann in view of Ho et al. (US 2003/0135640 A1).

Regarding claim 2, Bodenmann as applied above does not specifically disclose wherein said indicating comprises requesting a group acknowledgement from a destination of said group. In an analogous art, Ho remedies the deficiencies of Bodenmann by disclosing such limitation on Page 4, Paragraph 0033, lines 1 – 11. Therefore, it would have been obvious to one of ordinary skill

in the art at the time the invention was made to provide the technique of Ho to the system of Bodenmann in order to provide an efficient group acknowledgement that advantageously reduces the number of acknowledgement frames.

Regarding claim 3, Ho as applied above discloses receiving a group acknowledgement frame indicating the fragments in said group that were successfully received by a destination (Ho: Page 4, Paragraph 0035, lines 1 – 20).

Regarding claim 4, Ho as applied above discloses receiving at least one byte in said group acknowledgement frame wherein a bit of said byte in a designated position corresponding to a position of said fragment that was successfully received indicates that said at least one fragment was successfully received (providing indication that a data frame was correctly received; Ho: Page 4, Paragraph 0035, lines 1 – 15).

Regarding claim 5, Ho as applied above discloses comparing an indication of fragments successfully received by a destination against a record of transmitted fragments in said group (Ho: Page 4, Paragraph 0033, lines 1 – 11).

Regarding claim 6, Ho as applied above discloses transmitting a plurality of fragments without intermediate acknowledgement frames between at least two of said plurality of fragments (Ho: Page 3, Paragraph 0032, lines 1 – 18).

Regarding claim 8, Ho as applied above discloses retransmitting at least one fragment in said group that was indicated in a group acknowledgement as

being a fragment that was not successfully received (Ho: Page 4, Paragraph 0035, lines 1 – 20 and Page 1, Paragraph 0007, lines 1 – 31).

Regarding claim 11, Ho as applied above discloses transmitting a frame from said second station said frame from said second station including an indication of fragments in said group that were received by said second station (Ho: Page 4, Paragraph 0035, lines 1 – 20).

Regarding claim 12, Ho as applied above discloses comparing said indication of said fragments in said group that were received by said second station with the number of fragments in said group that were transmitted by said first station (Ho: Page 4, Paragraph 0033, lines 1 – 11).

Regarding claim 13, Ho as applied above discloses retransmitting from said first station fragments of said group transmitted by said first station that were not indicated as received in said frame from said second station (Ho: Page 4, Paragraph 0035, lines 1 – 20 and Page 1, Paragraph 0007, lines 1 – 31).

Regarding claim 14, Ho as applied above discloses transmitting at least one group acknowledgement frame in response to an interval during which said second station did not receive fragments of said group from said first station (Ho: Page 4, Paragraph 0035, lines 1 – 20 and Page 1, Paragraph 0007, lines 14 – 31).

Regarding claim 15, Ho as applied above discloses transmitting at least one group acknowledgement frame in response to an interval during which said second station did not receive fragments of said group from said first station, said

access control device and method in a mobile communication system where a base station reserves a specific access slot for a mobile station when the mobile station has data to transmit which exceeds one frame in length to thereby increase transmission efficiency and system performance.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C. Cho whose telephone number is (571) 272-7919. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on (571) 272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

interval comprising at least a period equal to a short inter-frame space plus at least one fragment slot (Ho: Page 4, Paragraph 0035, lines 1 – 20 and Page 1, Paragraph 0007, lines 14 – 31 wherein fragments are to resend within a certain time limit).

Regarding claim 18, the claim is interpreted and rejected for the same reason as set forth in claim 5.

Regarding claim 19, the claim is interpreted and rejected for the same reason as set forth in claim 6.

Regarding claim 21, Ho as applied above discloses wherein said processor is to determine which fragments of said group were not successfully received by a destination.

Regarding claim 22, Ho as applied above discloses a memory to record a number and order of transmitted fragments on said group (having a buffer; Ho: Page 4, Paragraph 0037, lines 1 – 14).

Regarding claim 24, the claim is interpreted and rejected for the same reason as set forth in claim 5.

Regarding claim 25, the claim is interpreted and rejected for the same reason as set forth in claim 8.

Regarding claim 26, Bodenmann in view of Ho as applied above discloses a method comprising: transmitting from a source a group of data fragments including a fragment of said group an indication that said fragment is a last fragment of said group (Bodenmann: Col. 17, line 39 through Col. 18, line 13);

and transmitting a group acknowledgement from a destination including data indicating the fragments in said group that were successfully received by a destination (Ho: Page 4, Paragraph 0033, lines 1 – 11).

Regarding claim 27, Ho as applied above discloses comparing an indication of fragments successfully received by said destination against a record of said transmitted fragments in said group (Ho: Page 4, Paragraph 0033, lines 1 – 11).

Regarding claim 28, Ho as applied above discloses retransmitting from a source fragments of a group that were not successfully received by said destination (Ho: Page 4, Paragraph 0035, lines 1 – 20 and Page 1, Paragraph 0007, lines 1 – 31).

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodenmann in view of Cho et al. (US 6,633,558 B1).

Regarding claim 7, Bodenmann as applied above does not specifically disclose transmitting an acknowledgement to indicate that a channel was accessed without collisions. In an analogous art, Cho remedies the deficiencies of Bodenmann by disclosing such limitation in Col. 2, lines 60 – 67 wherein transmitting an acknowledgement indicating that the channel access information has been received without collision. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Cho to the system of Bodenmann in order to provide a channel

Application/Control Number:  
10/718,812  
Art Unit: 2617

Page 10

Un C Cho  
Examiner  
Art Unit 2617

*George Eng*  
GEORGE ENG  
SUPERVISORY PATENT EXAMINER